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ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 **Wrapped Nucleics** The number/text at the end of each line "wrapped" down to the next line.
This may occur if your file was retrieved in a word processor after creating it.
Please adjust your right margin to .3, as this will prevent "wrapping".
- 2 **Wrapped Aminos** The amino acid number/text at the end of each line "wrapped" down to the next line.
This may occur if your file was retrieved in a word processor after creating it.
Please adjust your right margin to .3, as this will prevent "wrapping".
- 3 **Incorrect Line Length** The rules require that a line not exceed 72 characters in length. This includes spaces.
- 4 **Misaligned Amino Acid Numbering** The numbering under each 5th amino acid is misaligned. This may be caused by the use of tabs between the numbering. It is recommended to delete any tabs and use spacing between the numbers.
- 5 **Non-ASCII** This file was not saved in ASCII (DOS) text, as required by the Sequence Rules.
Please ensure your subsequent submission is saved in ASCII text so that it can be processed.
- 6 **Variable Length** Sequence(s) contain n's or Xaa's which represented more than one residue.
As per the rules, each n or Xaa can only represent a single residue.
Please present the maximum number of each residue having variable length and indicate in the (ix) feature section that some may be missing.
- 7 **PatentIn ver. 2.0 "bug"** A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequence(s) . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies primarily to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 8 **Skipped Sequences (OLD RULES)** Sequence(s) missing. If intentional, please use the following format for each skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X:
(i) SEQUENCE CHARACTERISTICS:(Do not insert any headings under "SEQUENCE CHARACTERISTICS")
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X:
This sequence is intentionally skipped

Please also adjust the "(iii) NUMBER OF SEQUENCES:" response to include the skipped sequence(s).
- 9 **Skipped Sequences (NEW RULES)** Sequence(s) missing. If intentional, please use the following format for each skipped sequence.
<210> sequence id number
<400> sequence id number
000
- 10 **Use of n's or Xaa's (NEW RULES)** Use of n's and/or Xaa's have been detected in the Sequence Listing.
Use of <220> to <223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 11 **Use of <213>Organism (NEW RULES)** Sequence(s) are missing this mandatory field or its response.
- 12 **Use of <220>Feature (NEW RULES)** Sequence(s) are missing the <220>Feature and associated headings.
Use of <220> to <223> is MANDATORY if <213>ORGANISM is "Artificial" or "Unknown"
Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 6/01/98, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of new Rules)
- 13 **PatentIn ver. 2.0 "bug"** Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file. Resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing).
Instead, please use "File Manager" or any other means to copy file to floppy disk.

PCT09

**Does Not Comply
Corrected Diskette Needed**

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/674,195

DATE: 01/11/2001
TIME: 17:17:37

Input Set : A:\65798 10_27_00.TXT
Output Set: N:\CRF3\01112001\I674195.raw

4 <110> APPLICANT: THE GOVERNMENT OF THE UNITED STATES OF AMERICA, AS REPRESENTED BY THE
5 DEPARTMENT OF HEALTH AND HUMAN SERVICES CENTERS FOR DISEASE CONTROL AND
6 PREVENTION
7 ZANCOPE-OLIVEIRA, ROSALY M.
8 LOTT, TIMOTHY J.
9 MAYER, LEONARD W.
10 REISS, ERROL
11 DEEPE, JR., GEORGE S.
13 <120> TITLE OF INVENTION: NUCLEIC ACIDS OF THE M ANTIGEN GENE OF
14 HISTOPLASMA CAPSULATUM, ISOLATED AND RECOMBINANTLY-PRODUCED
15 ANTIGENS, VACCINES AND ANTIBODIES, METHODS AND KITS FOR
16 DETECTING HISTOPLASMOSIS
19 <130> FILE REFERENCE: 65798 / US
21 <140> CURRENT APPLICATION NUMBER: US/09/674,195
22 <141> CURRENT FILING DATE: 2000-10-26
24 <150> PRIOR APPLICATION NUMBER: U.S. 60/083,676
25 <151> PRIOR FILING DATE: 1998-04-30
27 <150> PRIOR APPLICATION NUMBER: PCT/US99/09151
28 <151> PRIOR FILING DATE: 1999-04-27
30 <160> NUMBER OF SEQ ID NOS: 13
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34 <210> SEQ ID NO: 1
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36 <212> TYPE: DNA
37 <213> ORGANISM: Histoplasma capsulatum
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107 <211> LENGTH: 705
108 <212> TYPE: PRT
109 <213> ORGANISM: Histoplasma capsulatum
111 <400> SEQUENCE: 2

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→ see item 10
on Ena Summary
Sheet

RAW SEQUENCE LISTING

DATE: 01/11/2001

PATENT APPLICATION: US/09/674,195

TIME: 17:17:37

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117 35 40 45
118 Ser Leu Lys Ala Gly Asn Arg Gly Pro Thr Leu Leu Glu Asp Phe Ile
119 50 55 60
120 Phe Arg Gln Lys Ile Gln His Phe Asp His Glu Arg Val Pro Glu Arg
121 65 70 75 80
122 Ala Val His Ala Arg Gly Ala Gly Ala His Gly Val Phe Thr Ser Tyr
123 85 90 95
124 Asn Asn Trp Ser Asn Ile Thr Ala Ala Ser Phe Leu Asn Ala Ala Gly
125 100 105 110
126 Lys Gln Thr Pro Val Phe Val Arg Phe Ser Thr Val Ala Gly Ser Arg
127 115 120 125
128 Gly Ser Val Asp Ser Ala Arg Asp Ile His Gly Phe Ala Thr Arg Leu
129 130 135 140
130 Tyr Thr Asp Glu Gly Asn Phe Asp Ile Val Gly Asn Asn Val Pro Val
131 145 150 155 160
132 Phe Phe Ile Gln Asp Ala Ile Gln Phe Pro Asp Leu Ile His Ala Val
133 165 170 175
134 Lys Pro Gln Pro Asp Ser Glu Ile Pro Gln Ala Ala Thr Ala His Asp
135 180 185 190
136 Thr Ala Trp Asp Phe Leu Ser Gln Gln Pro Ser Ser Leu His Ala Leu
137 195 200 205
138 Phe Trp Ala Met Ser Gly His Gly Ile Pro Arg Ser Met Arg His Val
139 210 215 220
140 Asp Gly Trp Gly Val His Thr Phe Arg Leu Val Thr Asp Glu Gly Asn
141 225 230 235 240
142 Ser Thr Leu Val Lys Phe Arg Trp Lys Thr Leu Gln Gly Arg Ala Gly
143 245 250 255
144 Leu Val Trp Glu Glu Ala Gln Ala Leu Gly Gly Lys Asn Pro Asp Phe
145 260 265 270
146 His Arg Glu Asp Leu Trp Asp Ala Ile Glu Ser Gly Arg Tyr Pro Glu
147 275 280 285
148 Trp Glu Leu Gly Phe Gln Leu Val Asn Glu Ala Asp Gln Ser Lys Phe
149 290 295 300
150 Asp Phe Asp Leu Leu Asp Pro Thr Lys Ile Ile Pro Glu Glu Leu Val
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152 Pro Phe Thr Pro Ile Gly Lys Met Val Leu Asn Arg Asn Pro Lys Ser
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154 Tyr Phe Ala Glu Thr Glu Gln Ile Met Phe Gln Pro Gly His Val Val
155 340 345 350
156 Arg Gly Ile Asp Phe Thr Asp Asp Pro Leu Leu Gln Gly Arg Leu Tyr
157 355 360 365
158 Ser Tyr Leu Asp Thr Gln Leu Asn Arg His Gly Gly Pro Asn Phe Glu
159 370 375 380
160 Gln Leu Pro Ile Asn Arg Pro Arg Ile Pro Phe His Asn Asn Asn Arg

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RAW SEQUENCE LISTING

DATE: 01/11/2001

PATENT APPLICATION: US/09/674,195

TIME: 17:17:37

Input Set : A:\65798 10_27_00.TXT

Output Set: N:\CRF3\01112001\I674195.raw

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161 385          390          395          400
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163          405          410          415
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165          420          425          430
166 Asn Arg Gly Phe Thr Ala Pro Gly Arg Met Val Asn Gly Pro Leu
167          435          440          445
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169          450          455          460
170 Leu Phe Tyr Asn Ser Leu Thr Val Phe Glu Lys Gln Phe Leu Val Asn
171 465          470          475          480
172 Ala Met Arg Phe Glu Asn Ser His Val Arg Ser Glu Thr Val Arg Lys
173          485          490          495
174 Asn Val Ile Ile Gln Leu Asn Arg Val Asp Asn Asp Leu Ala Arg Arg
175          500          505          510
176 Val Ala Leu Ala Ile Gly Val Glu Pro Pro Ser Pro Asp Pro Thr Phe
177          515          520          525
178 Tyr His Asn Lys Ala Thr Val Pro Ile Gly Thr Phe Gly Thr Asn Leu
179          530          535          540
180 Leu Arg Leu Asp Gly Leu Lys Ile Ala Leu Leu Thr Arg Asp Asp Gly
181 545          550          555          560
182 Ser Phe Thr Ile Ala Glu Gln Leu Arg Ala Ala Phe Asn Ser Ala Asn
183          565          570          575
184 Asn Lys Val Asp Ile Val Leu Val Gly Ser Ser Leu Asp Pro Gln Arg
185          580          585          590
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187          595          600          605
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195          660          665          670
196 Val Tyr Ile Ser Asn Asp Val Ser Glu Ala Tyr Val Arg Ser Val Leu
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204 <211> LENGTH: 8
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206 <213> ORGANISM: Histoplasma capsulatum
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RAW SEQUENCE LISTING

DATE: 01/11/2001

PATENT APPLICATION: US/09/674,195

TIME: 17:17:37

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260 <213> ORGANISM: Histoplasma capsulatum
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267 <211> LENGTH: 15
268 <212> TYPE: DNA
269 <213> ORGANISM: Unknown
271 <220> FEATURE:
272 <223> OTHER INFORMATION: Primer R=AG, Y=CT, V=AGC
274 <400> SEQUENCE: 10
275  aaraayccvg aytly

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15

VERIFICATION SUMMARY DATE: 01/11/2001
PATENT APPLICATION: US/09/674,195 TIME: 17:17:38

Input Set : A:\65798 10_27_00.TXT
Output Set: N:\CRF3\01112001\I674195.raw

L:21 M:270 C: Current Application Number differs, Replaced Current Application Number
L:22 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:94 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:1
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L:94 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:1
L:286 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:11
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Raw Sequence Listing Error Summary

ERROR DETECTED SUGGESTED CORRECTION

SERIAL NUMBER:

09/674,195

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

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(i) SEQUENCE CHARACTERISTICS:(Do not insert any headings under "SEQUENCE CHARACTERISTICS")
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X:
This sequence is intentionally skipped

Please also adjust the "(iii) NUMBER OF SEQUENCES:" response to include the skipped sequence(s).
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<400> sequence id number
000
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Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 6/01/98, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of new Rules)
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Instead, please use "File Manager" or any other means to copy file to floppy disk.